

## IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1           1-29. (Canceled)

1           30.     (New) A formatting template for printing XML files, comprising a data map,  
2 wherein the data map comprises at least one XML Descriptor (XMD) defining formatting for  
3 an XML data element, the XMDs being associated with a qualified tag formed by a  
4 concatenation of XML start tags parsed from an XML document, the XMD and qualified  
5 tags being configured to provide a format for XML data for merging in a single step with  
6 XML data to produce a data stream for printing.

1           31.     (New) The formatting template of claim 30, wherein the qualified tag  
2 identifies a formatting instruction that is used to format the content for an XML: data element.

1           32.     (New) The formatting template of claim 30, wherein the qualified tag is  
2 generated whenever a start tag is encountered when parsing a XML document.

1           33.     (New) The formatting template of claim 30, wherein the data map comprises  
2 a chain of XML descriptors for formatting attributes if XML elements, wherein the attributes  
3 are broken into fields.

1           34.     (New) The formatting template of claim 30, wherein an XML descriptor that  
2 does not have a matching qualified tag is skipped and a next XML descriptor matching a start  
3 tag is used in formatting the XML data.

1           35.   (New) A printing system, comprising:  
2           a spooler for receiving printable information from the print channel;  
3           a print services facility for parsing an XML file; and  
4           a printer for printing the print stream according to the formatting defined by the  
5   formatting template;

6                       wherein the formatting template defines a data map comprising at least one  
7   XML Descriptor (XMD) defining formatting for an XML data element, the XMDs being  
8   associated with a qualified tag formed by a concatenation of XML start tags parsed from an  
9   XML document, the XMD and qualified tags being configured to provide a format for XML  
10   data for merging in a single step with XML data to produce a data stream for printing.

1           36.   (New) The printing system of claim 35, wherein the qualified tag identifies a  
2   formatting instruction that is used to format the content for an XML: data element.

1           37.   (New) The formatting template of claim 35, wherein the parser generates a  
2   qualified tag whenever a start tag is encountered when parsing a XML document.

1           38.   (New) The formatting template of claim 35, wherein the data map comprises  
2   a chain of XML descriptors for formatting attributes of XML elements, wherein the attributes  
3   are broken into fields.

1           39.   (New) The formatting template of claim 35, wherein the parser skips an XML  
2   descriptor that does not have a matching qualified tag and uses a next XML descriptor having  
3   a matching start tag to format the XML data.

1           40.   (New) The formatting template of claim 35 further comprising a buffer for  
2 storing start tags in order as the XML file is parsed, wherein the parser removes the previous  
3 start tag identified as matching a qualified tag when an end tag is found.

1           41.   (New) A method for printing XML files directly using a formatting template,  
2 comprising:  
3           placing an XML file to be printed on a server spool;  
4           parsing the XML file until a start tag associated with an XML element is encountered;  
5           generating a qualified tag in response to encountering the start tag;  
6           searching a data map comprising XML descriptors until an XML descriptor  
7 associated with a qualified tag matching the generated qualified tag is identified;  
8           merging in a single step the XML element associated with the encountered start tag  
9 with the XML descriptor associated with a qualified tag matching the generated qualified tag  
10 to produce a formatted print data stream; and  
11           printing a document using the produced formatted print data stream.

1           42.   (New) The method of claim 41, further comprising determining whether the  
2 end of the document has been reached.

1           43.   (New) The method of claim 41, further comprising continuing to process  
2 parsed XML element until the end of the document is reached.

1           44.     (New) The method of claim 41 further comprising identifying a formatting  
2     instruction that is used to format the content for an XML data element according to an XML  
3     descriptor having a qualified tag matching the generated qualified tag is identified.

1           45.     (New) The method of claim 41 further comprises generating the qualified tag  
2     whenever a start tag is encountered when parsing a XML document.

1           46.     (New) The method of claim 41 further comprising skipping an XML  
2     descriptor that does not have a matching qualified tag and using a next XML descriptor  
3     matching a start tag to format the XML data.

1           47.     (New) An article of manufacture comprising a program storage medium  
2     readable by a computer, the medium tangibly embodying one or more programs of  
3     instructions executable by the computer to perform a method for printing XML files directly  
4     using a formatting template, the method comprising:  
5                 placing an XML file to be printed on a server spool;  
6                 parsing the XML file until a start tag associated with an XML element is encountered;  
7                 generating a qualified tag in response to encountering the start tag;  
8                 searching a data map comprising XML descriptors until an XML descriptor  
9     associated with a qualified tag matching the generated qualified tag is identified;  
10                merging in a single step the XML element associated with the encountered start tag  
11     with the XML descriptor associated with a qualified tag matching the generated qualified tag  
12     to produce a formatted print data stream; and  
13                printing a document using the produced formatted print data stream.

1           48.   (New) The method of claim 41, further comprising determining whether the  
2   end of the document has been reached.

1           49.   (New) The method of claim 41, further comprising continuing to process  
2   parsed XML element until the end of the document is reached.

1           50.   (New) The method of claim 41 further comprising identifying a formatting  
2   instruction that is used to format the content for an XML data element according to an XML  
3   descriptor having a qualified tag matching the generated qualified tag is identified.

1           51.   New) The method of claim 41 further comprises generating the qualified tag  
2   whenever a start tag is encountered when parsing a XML document.

1           52.   (New) The method of claim 41 further comprising skipping an XML  
2   descriptor that does not have a matching qualified tag and using a next XML descriptor  
3   matching a start tag to format the XML data.